

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 5 of 5 returned.**☐ 1. Document ID: US 6475521 B1

L8: Entry 1 of 5

File: USPT

Nov 5, 2002

US-PAT-NO: 6475521

DOCUMENT-IDENTIFIER: US 6475521 B1

TITLE: Biphasic controlled release delivery system for high solubility pharmaceuticals and method

DATE-ISSUED: November 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Timmins; Peter	Irby			GB
Dennis; Andrew B.	Barnston			GB
Vyas; Kiren A.	Canterbury			GB

US-CL-CURRENT: [424/469](#); [424/457](#), [424/468](#), [424/470](#), [424/484](#), [424/485](#), [424/486](#), [424/488](#), [514/772.3](#), [514/779](#), [514/781](#), [514/951](#)

## ABSTRACT: .

A biphasic controlled release delivery system for pharmaceuticals which have high water solubility, such as the antidiabetic metformin HCl salt, is provided which provides a dosage form that has prolonged gastric residence so that a dosing regimen of at least one gram metformin, once daily, may be achieved while providing effective control of plasma glucose. The delivery system includes (1) an inner solid particulate phase formed of substantially uniform granules containing a pharmaceutical having a high water solubility, and one or more hydrophilic polymers, one or more hydrophobic polymers and/or one or more hydrophobic materials such as one or more waxes, fatty alcohols and/or fatty acid esters, and (2) an outer solid continuous phase in which the above granules of inner solid particulate phase are embedded and dispersed throughout, the outer solid continuous phase including one or more hydrophilic polymers, one or more hydrophobic polymers and/or one or more hydrophobic materials such as one or more waxes, fatty alcohols and/or fatty acid esters, which may be compressed into tablets or filled into capsules. Methods for forming the so-described biphasic controlled release delivery system and using such biphasic controlled release delivery system for treating diabetes are also provided.

50 Claims, 0 Drawing figures

Exemplary Claim Number: 1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">IMC</a>	<a href="#">Draw Desc</a>	<a href="#">Image</a>
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☐ 2. Document ID: US 6281015 B1

L8: Entry 2 of 5

File: USPT

Aug 28, 2001

US-PAT-NO: 6281015

DOCUMENT-IDENTIFIER: US 6281015 B1

TITLE: Localized delivery of factors enhancing survival of transplanted cells

DATE-ISSUED: August 28, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mooney; David J.	Ann Arbor	MI		
Langer; Robert S.	Newton	MA		
Vacanti; Joseph P.	Winchester	MA		

US-CL-CURRENT: 435/395; 424/457, 424/462, 424/93.7, 435/325, 435/405, 514/3

ABSTRACT:

Growth factors and/or angiogenic factors are administered in combination with dissociated cells to be transplanted, preferably in microspheres with the cells on or in a polymeric matrix, to enhance survival and proliferation of the transplanted cells. Examples demonstrate that epidermal growth factor (EGF) was incorporated into microspheres fabricated from a copolymer of lactic and glycolic acid using a double emulsion technique, the incorporated EGF was steadily released over one month in vitro, and it remained biologically active, as determined by its ability to stimulate DNA synthesis, division, and long-term survival of cultured hepatocytes. EGF-containing microspheres were mixed with a suspension of hepatocytes, seeded onto porous sponges, and implanted into the mesentery of two groups of Lewis rats, to demonstrate efficacy in vivo. Two weeks after implantation in PCS animals, devices which included EGF-containing microspheres showed a two-fold increase in the number of engrafted hepatocytes, as compared to implants which received blank microspheres.

9 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	NIMC	Draw Desc	Image
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3. Document ID: US 5820879 A

L8: Entry 3 of 5

File: USPT

Oct 13, 1998

US-PAT-NO: 5820879

DOCUMENT-IDENTIFIER: US 5820879 A

TITLE: Method of delivering a lipid-coated condensed-phase microparticle composition

DATE-ISSUED: October 13, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fernandez; Julio M.	Rochester	MN		
Knudson; Mark B.	Shoreview	MN		

US-CL-CURRENT: 424/450; 424/1.21, 424/489, 424/490, 424/9.4

ABSTRACT:

A method of delivering a therapeutic compound to an in vivo target site having a selected pH, temperature, ligand concentration or binding-molecule characteristic. The method includes entrapping the therapeutic compound in an encapsulated microparticle composition that, when exposed to a selected target stimulus related to pH,

temperature, radiation, or the presence of a selected ligand or ion-channel activator, decondenses to release compound into the target site. The encapsulated microparticle composition consists of a condensed-phase particle matrix containing the compound to be delivered in entrapped form, and a stimulus-responsive lipid bilayer membrane formed around the matrix. Localized perturbation of the lipid membrane, and influx of monovalent counterions into the polymer matrix, in response to the selected target stimulus, causes matrix swelling and compound release from the particles.

27 Claims, 43 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWC	Draw Desc	Image
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4. Document ID: US 5753261 A

L8: Entry 4 of 5

File: USPT

May 19, 1998

US-PAT-NO: 5753261  
DOCUMENT-IDENTIFIER: US 5753261 A

TITLE: Lipid-coated condensed-phase microparticle composition

DATE-ISSUED: May 19, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fernandez; Julio M.	Rochester	MN		
Knudson; Mark B.	Shoreview	MN		

US-CL-CURRENT: 424/450; 424/489, 424/490

ABSTRACT:

A microparticle composition for use in compound delivery, when the composition is exposed to a selected target stimulus related to pH, temperature, radiation, or the presence of a selected ligand or ion-channel activator, is disclosed. The composition includes a condensed-phase particle matrix containing the compound to be delivered in entrapped form, and a stimulus-responsive lipid bilayer membrane formed around the matrix. Localized perturbation of the lipid membrane, and influx of monovalent counterions into the polymer matrix, in response to the selected target stimulus, causes matrix swelling and compound release from the particles.

20 Claims, 43 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RWC	Draw Desc	Image
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5. Document ID: US 5413797 A

L8: Entry 5 of 5

File: USPT

May 9, 1995

US-PAT-NO: 5413797  
DOCUMENT-IDENTIFIER: US 5413797 A

TITLE: Controlled release ACTH containing microspheres

DATE-ISSUED: May 9, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Khan; M. Amin	Burlington	MA		
Bernstein; Howard	Cambridge	MA		

US-CL-CURRENT: 424/489; 424/422, 424/423, 424/424, 424/426, 424/434, 424/486, 514/769, 514/772, 514/772.3, 514/805, 514/963

## ABSTRACT:

ACTH polymeric controlled release systems are described wherein the ACTH retains good biological activity and is released over an extended period of time following administration by injection. In the preferred embodiment, the ACTH polymeric microspheres are made using very cold temperatures to freeze the polymer-ACTH mixtures into polymeric microspheres with very high retention of biological activity and material. Sustained release of biologically active ACTH is achieved when the microspheres are tested in vitro, extending over a period of greater than one day to several months. Altered release can be achieved by inclusion of degradation modifiers, pore forming agents, and stabilizers of the ACTH.

12 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[RMC](#) [Draw Desc](#) [Image](#)[Generate Collection](#)[Print](#)

Term	Documents
CAPSULE.USPT.	51504
CAPSULES.USPT.	72252
ERODIBLE.USPT.	1400
ERODIBLES.USPT.	1
POLYMER.USPT.	318945
POLYMERS.USPT.	248944
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## WEST Search History

DATE: Wednesday, January 22, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L12	18 and pulsating	0	L12
L11	L10 and pulsating	0	L11
L10	L9 and (drug or pharmaceutical)	69	L10
L9	13 and capsule and erodible polymer	69	L9
L8	12 and capsule and erodible polymer	5	L8
L7	L6 and erodible polymer	6	L7
L6	L1 and capsule	240	L6
L5	L4 and capsule	1	L5
L4	pulsating adj release	11	L4
L3	controlled adj release	15423	L3
L2	extended adj release	1001	L2
L1	puls\$5 adj release	665	L1

END OF SEARCH HISTORY

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 6 of 6 returned.****1. Document ID: US 6472434 B1**

L7: Entry 1 of 6

File: USPT

Oct 29, 2002

US-PAT-NO: 6472434

DOCUMENT-IDENTIFIER: US 6472434 B1

TITLE: Method for minimizing excess collagen deposition

DATE-ISSUED: October 29, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Place; Virgil A.	Kawaihae	HI		
Wilson; Leland F.	Menlo Park	CA		
Doherty, Jr.; Paul C.	Cupertino	CA		
Hanamoto; Mark S.	Belmont	CA		
Spivack; Alfred P.	Menlo Park	CA		
Gesundheit; Neil	Los Altos	CA		
Bennett; Sean R.	Denver	CO		

US-CL-CURRENT: 514/573

## ABSTRACT:

Methods and formulations for minimizing excess collagen are provided. A pharmaceutical composition formulated so as to contain a selected vasoactive agent is administered to the vagina, vulvar area or urethra of the individual undergoing treatment. Suitable vasoactive agents are vasodilators, including naturally occurring prostaglandins, synthetic prostaglandin derivatives, endothelial-derived relaxation factors, vasoactive intestinal polypeptide agonists, smooth muscle relaxants, leukotriene inhibitors, and others.

32 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMC	Draw Desc	Image
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**2. Document ID: US 6469016 B1**

L7: Entry 2 of 6

File: USPT

Oct 22, 2002

US-PAT-NO: 6469016

DOCUMENT-IDENTIFIER: US 6469016 B1

TITLE: Treatment of female sexual dysfunction using phosphodiesterase inhibitors

DATE-ISSUED: October 22, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Place; Virgil A.	Kawaihae	HI		
Wilson; Leland F.	Menlo Park	CA		
Doherty, Jr.; Paul C.	Cupertino	CA		
Hanamoto; Mark S.	Belmont	CA		
Spivack; Alfred P.	Menlo Park	CA		
Gesundheit; Neil	Los Altos	CA		
Bennett; Sean R.	Denver	CO		

US-CL-CURRENT: 514/341

## ABSTRACT:

Methods and formulations for treating female sexual dysfunction are provided. A pharmaceutical composition formulated so as to contain a selected vasoactive agent is administered to the vagina, vulvar area or urethra of the individual undergoing treatment. Suitable vasoactive agents are vasodilators, including naturally occurring prostaglandins, synthetic prostaglandin derivatives, endothelial-derived relaxation factors, vasoactive intestinal polypeptide agonists, smooth muscle relaxants, leukotriene inhibitors, and others. The formulations are also useful for preventing the occurrence of yeast infections, improving vaginal muscle tone and tissue health, enhancing vaginal lubrication, and minimizing excess collagen deposition. A clitoral drug delivery device is also provided.

64 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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## 3. Document ID: US 6306841 B1

L7: Entry 3 of 6

File: USPT

Oct 23, 2001

US-PAT-NO: 6306841

DOCUMENT-IDENTIFIER: US 6306841 B1

TITLE: Treatment of female sexual dysfunction

DATE-ISSUED: October 23, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Place; Virgil A.	Kawaihae	HI		
Wilson; Leland F.	Menlo Park	CA		
Doherty, Jr.; Paul C.	Cupertino	CA		
Hanamoto; Mark S.	Belmont	CA		
Spivack; Alfred P.	Menlo Park	CA		
Gesundheit; Neil	Los Altos	CA		
Bennett; Sean R.	Denver	CO		

US-CL-CURRENT: 514/149; 514/150, 514/236.5, 514/236.8, 514/530, 514/573

## ABSTRACT:

Methods and formulations for treating female sexual dysfunction are provided. A pharmaceutical composition formulated so as to contain a selected vasoactive agent is

administered to the vagina, vulvar area or urethra of the individual undergoing treatment. Suitable vasoactive agents are vasodilators, including naturally occurring prostaglandins, synthetic prostaglandin derivatives, endothelial-derived relaxation factors, vasoactive intestinal polypeptide agonists, smooth muscle relaxants, leukotriene inhibitors, and others. The formulations are also useful for preventing the occurrence of yeast infections, improving vaginal muscle tone and tissue health, enhancing vaginal lubrication, and minimizing excess collagen deposition. A clitoral drug delivery device is also provided.

31 Claims, 1 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FWMC	Draw Desc	Image
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#### 4. Document ID: US 6294550 B1

L7: Entry 4 of 6

File: USPT

Sep 25, 2001

US-PAT-NO: 6294550  
DOCUMENT-IDENTIFIER: US 6294550 B1

TITLE: Treatment of female sexual dysfunction

DATE-ISSUED: September 25, 2001

#### INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Place; Virgil A.	Kawaihee	HI		
Wilson; Leland F.	Menlo Park	CA		
Doherty, Jr.; Paul C.	Cupertino	CA		
Hanamoto; Mark S.	Belmont	CA		
Spivack; Alfred P.	Menlo Park	CA		
Gesundheit; Neil	Los Altos	CA		
Bennett; Sean R.	Denver	CO		

US-CL-CURRENT: 514/302

#### ABSTRACT:

Methods and formulations for treating female sexual dysfunction are provided. A pharmaceutical composition formulated so as to contain a selected vasoactive agent is administered to the vagina, vulvar area or urethra of the individual undergoing treatment. Suitable vasoactive agents are vasodilators, including naturally occurring prostaglandins, synthetic prostaglandin derivatives, endothelial-derived relaxation factors, vasoactive intestinal polypeptide agonists, smooth muscle relaxants, leukotriene inhibitors, and others. The formulations are also useful for preventing the occurrence of yeast infections, improving vaginal muscle tone and tissue health, enhancing vaginal lubrication, and minimizing excess collagen deposition. A clitoral drug delivery device is also provided.

29 Claims, 2 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	FWMC	Draw Desc	Image
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## 5. Document ID: US 5877216 A

L7: Entry 5 of 6

File: USPT

Mar 2, 1999

US-PAT-NO: 5877216

DOCUMENT-IDENTIFIER: US 5877216 A

TITLE: Treatment of female sexual dysfunction

DATE-ISSUED: March 2, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Place; Virgil A.	Kawaihae	HI		
Wilson; Leland F.	Menlo Park	CA		
Doherty, Jr.; Paul C.	Cupertino	CA		
Hanamoto; Mark S.	Belmont	CA		
Spivack; Alfred P.	Menlo Park	CA		
Gesundheit; Neil	Los Altos	CA		
Bennett; Sean R.	Denver	CO		

US-CL-CURRENT: 514/573

## ABSTRACT:

Methods and formulations for treating female sexual dysfunction are provided. A pharmaceutical composition formulated so as to contain a selected vasodilating agent is administered to the vagina or vulvar area of the individual undergoing treatment. Suitable vasodilating agents include naturally occurring prostaglandins, synthetic prostaglandin derivatives, endothelial-derived relaxation factors, vasoactive intestinal polypeptide agonists, smooth muscle relaxants, leukotriene inhibitors, pharmaceutically acceptable salts, esters and inclusion complexes of any of the foregoing, and mixtures thereof. The novel formulations are also useful for preventing the occurrence of yeast infections, improving vaginal muscle tone and tissue health, enhancing vaginal lubrication, and minimizing excess collagen deposition. A clitoral drug delivery device is also provided.

25 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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## 6. Document ID: US 5252494 A

L7: Entry 6 of 6

File: USPT

Oct 12, 1993

US-PAT-NO: 5252494

DOCUMENT-IDENTIFIER: US 5252494 A

TITLE: Fiber optic sensors, apparatus, and detection methods using controlled release polymers and reagent formulations held within a polymeric reaction matrix

DATE-ISSUED: October 12, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walt; David R.	Lexington	MA		

US-CL-CURRENT: 436/528; 385/123, 385/125, 385/144, 385/145, 422/58, 422/82.05,  
422/82.06, 422/82.07, 422/82.08, 422/82.09, 422/82.11, 435/287.7, 435/288.7, 435/7.7,  
435/7.72, 435/7.9, 435/808, 436/164, 436/172, 436/531, 436/535, 436/800, 436/805,  
436/807

## ABSTRACT:

An improved fiber optic sensor, sensing apparatus, and methods for making optical detections are provided. The fiber optic sensor employs a fiber optic strand to convey light energy, an immobilized polymeric reaction matrix, and at least one controlled release polymeric carrier within said reaction matrix comprising a controlled release polymer material and a releasable reagent formulation able to react with the analyte of interest. The optic sensors and sensor construction have been demonstrated to be both functionally useful and long serving in duration.

13 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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Term	Documents
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POLYMERS.USPT.	248944
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